# 2.1. Oral presentations: The impact of COVID-19 on health services

## After Action Reviews to assess COVID-19 hospital responses

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#### Introduction:

After-Action Reviews (AARs) are healthcare management tools applied to evaluate responses to public health emergencies, identifying best practices and challenges. They are included in the International Health Regulations (IHR) and recommended by the World Health Organization (WHO). The aim of this study was to adapt the WHO AAR guidelines to assess the response during the COVID-19 first epidemic wave (February 22nd-May 3rd, 2020) at San Raffaele Scientific Institute, a large university hospital in Milan, Italy. The hospital treated 951 patients and underwent massive re-organization.

# Methods:

We developed a hospital-oriented AAR based on the keyinformant interview format. After establishing an AAR planning and analysis team, an ad-hoc questionnaire was designed to explore four areas: i)Staff management; ii)Logistics and supplies; iii)Diagnosis and clinical management; iv)Communication. The questionnaire was used to support 36 semi-structured interviews of professionals with executive, clinical, technical and administrative roles within the hospital. **Results:** 

The hospital response was rated as overall effective and sufficiently prompt. Participants stressed the key roles played by: i)strong governance and coordination; ii)readiness and availability of healthcare personnel; iii)multidisciplinary model of care based on levels of intensity. Major challenges concerned communication strategies and staff training. In addition, participants highlighted the need for greater collaboration among hospitals and primary care services.

# **Conclusions:**

This study represents one of the first applications of an AAR to the COVID-19 emergency and to the hospital setting. The tool provided San Raffaele's hospital management with a multilayered analysis of the emergency response that informed the critical planning for next phases of the pandemic response. The tool can be adapted to other settings to pursue continuous operational improvement.

## Key messages:

- After-action reviews are healthcare managements tools used to to evaluate a country or government's response to infectious disease outbreaks, environmental or natural disasters and societal crises.
- After Action Reviews can be adapted or scaled for other settings to pursue continuous operational improvement and support preparedness strategies for future public health emergencies.